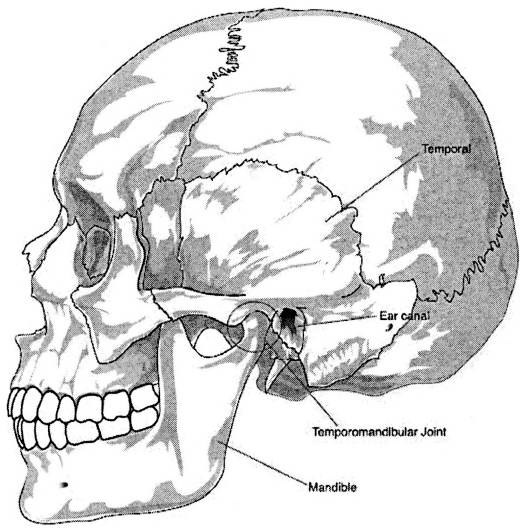
Portsmouth Hospitals NHS
NHS Trust

Temporomandibular Joint (TMJ) Dysfunction

Information for patients



Specialist Support
If you require this leaflet in another language, large print or another format, please contact the Health Information Centre
Tel: (023) 9228 6757, who will advise you.

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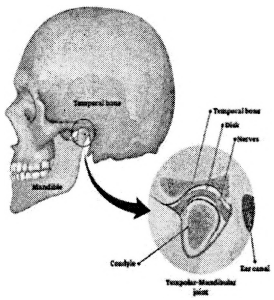
What is Temporomandibular Joint Dysfunction?



To give it it's full name, it is Temporo-mandibular Joint Pain Dysfunction Syndrome. It can also be called Temporomandibular Joint Arthromyalgia, facial Arthromyalgia or Myofacial Pain Syndrome. As the short name implies, it is not a disease but a condition where the bones, muscles, cartilages and ligaments of the joint between the jaw and the base of the skull are not working correctly.

Symptoms

These are many and varied, but the three most common are pain, a clicking/crunching /cracking noise in the joint or ear, and an inability to open the mouth fully, either always or just occasionally. The pain is usually in front of the ear, in the jaw or cheek, but may occur in the temple, the neck or even inside the mouth, such as in the gums or under the tongue.

What causes it?

There are a number of causes and frequently it is a combination of these rather than a single reason:

1. There may have been a blow to the jaw, either directly to the joint or elsewhere on the bone.

2. The teeth on each side may not bite together evenly, so that one side of the jaw does not work and puts more stress on the joint structure. Also, your "bite' may be such that the joint has to work in an unbalanced way.

3. You may have a habit that makes the jaw muscles tire easily and ache. Often this is 'subconscious' and you may be unaware of it happening. It may even occur whilst you are asleep. These habits include teeth clenching, teeth grinding, abnormal jaw posture or even just tensing up the facial and jaw muscles.

4. You may be under general stress. There may be any number of reasons for this which, again, you may not even be aware of. Problems with family, spouse, exams, money, work or neighbours are frequent causes, but it could be anything. Anxiety, fear, depression, agitation and tension affect production of chemical messengers in the bloodstream called hormones. These have several effects on the body, and this can include making the joints more difficult to move because the joint fluid becomes thicker.

For some reason the jaw joint is particularly sensitive. The muscles have to work harder, so they ache. The cartilage inside the joint may even get pulled out of place.

Stress is the most important factor, but any of the above may contribute.

How is it treated?

Treatments are either 'general' or 'specific'.

General

- Things that can help include applying heat and massage to the joint and muscles. Simple painkillers, such as Paracetamol are helpful, especially if the condition is mild. Every effort should be made to make your jaw open and close straight up and down without protruding as it opens.

- Avoid opening the jaw too wide, especially when yawning.

- Avoid excessive chewing and cut tough food into small pieces.

- Avoid pushing the jaw into strained positions for any length of time.

Specific

Splints

These may be made from soft or hard plastic. Soft splints are used to try to prevent teeth clenching or grinding habit or to control muscle spasm, soft splints are made from clear, soft, thin plastic and are rather like gum shields that a sports person might wear.

Hard splints are similar to braces used to straighten teeth, but are without wires, except on the back teeth to keep the splint in. They are often effective when the bite is out of balance or if there is a prominent click in the joint, as it helps to reposition the cartilage inside the joint.

If the bite is really unbalanced, then occasionally teeth may need to be ground down to correct this. If it is severe, the teeth may need to be moved or surgery may be needed, particularly in younger patients. If you have dentures these may need to be adjusted or replaced so that they fit or bite together better.

Physiotherapy

This can take the form of exercises, manipulation, ultrasound or heat treatment to the joint and/or muscles. It is often effective when the jaw opening pattern needs correcting or if there is painful muscle spasm. It is also very effective if the cause of the problem was an injury.

Medication

This can be divided into pain relievers and muscle relaxants. Pain relievers (other than simple medications such as Paracetamol) are used to treat acutely painful joints and patients with signs of inflammation. Muscle relaxants are used to treat stiff and painful muscles. Most of them also tend to relax patients generally and some cause drowsiness. However, because many patients are under stress of some kind, they can benefit from this kind of medication.

Counselling

As stated before, stress is a very important component in many patients. One method of helping with stress is through counselling. Many patients feel better as a result of understanding that they may be under stress. It is not always easy to cope with stress, so skilled counsellors can be employed to help. A few patients even benefit from psychotherapy.

Surgery

It is very rarely used purely for pain as it is not very effective. it can be effective where there is disability in jaw opening. The surgery is intricate and can have side effects. Nowadays it is quite easy to look inside the joint with a mini-telescope, and this is usually done first. A few patients benefit from having nerves frozen or cut if pain is very severe and, occasionally, an injection into the joint space can be helpful.

Can it be cured?

The answer is a guarded 'yes'. Most patients do get better, but it usually takes some months or even longer. However, a good number do get better quickly and don't suffer again. Many find that it is a condition that comes and goes and that each episode requires some sort of treatment to help. Only a few people seem to be resistant to treatment and, even then, some form of treatment is usually helpful.

Temporomandibular Joint (TMJ) Problems

As has been explained to you, there are certain things which you can do to help your problem and certain things that can make it worse.

To help

- Use a well-padded hot water bottle or hot wet flannel on the outside of the face
- Take simple painkillers such as Panadol
- Wear a hat or scarf in cold weather
- Support the jaw when yawning
- Eat a soft diet (i.e. Nothing which needs lot of chewing)
- Chew equally on both sides of the mouth

To avoid

- Chewing gum
- Putting pens, pencils, fingers etc in the mouth
- Biting fingernails
- Do not bite into large items of food, e.g. apples. These should be cut up into small pieces first
- Avoid chewing with the front teeth
- Avoid clenching and grinding your teeth e.g. when concentrating
- Do not rest your jaws on your hands

These activities could worsen or increase pain and discomfort.

Exercises to improve the function of the TMJ

The purpose of the exercise is to prevent clicking of the jaw and to strengthen muscles which will pull your jaw backwards. It will relax the muscles which will pull the jaw forwards or to one side as you open your mouth and this will take the strain off your joints.

Set aside two five-minute periods every day at a time when you are relaxed and have nothing on your mind. A good time is before going to bed, another perhaps when you get home from work. Sit upright in a chair and carry out the following procedure.

1. Close your mouth on your back teeth, resting the tip of your tongue on your palate just behind the upper front teeth.
2. Run the tip of your tongue backwards on to the soft palate as far back as it will go, keeping the teeth in contact with each other.
3. Force the tongue back to maintain contact with the soft palate and slowly open your mouth until you feel your tongue just being pulled away from the soft palate. Do not try and open your mouth further. Keep it in this position for five seconds and then close your mouth. Relax for 5 seconds.
4. Repeat this manoeuvre slowly over the next five minutes in a firm but relaxed fashion.

As you open your mouth, you should feel tension in the muscles at the back of your jaw and beneath your chin. For the first few times that you do the exercise you should check in front of a mirror that the lower teeth move vertically downwards - that is, there is no slight movement from side to side as you open your mouth.

If the exercise is carried out correctly, there will be no clicks or noise from the joint. If there is, there might be some error in carrying out the exercise. Repeat steps 1-4.

Do this exercise no more than the recommended amount for the first week. Initially, it may seem to make your pain worse, but this will be as a result of unaccustomed exercise. Therefore, do the exercise as often as you can and this will help to strengthen the ligaments around your joints.

If this exercise is carried out correctly and regularly over a two- or three-week period, you will retrain your muscles so that your jaw opens and closes smoothly without clicks or jerks, and any pain that you are experiencing will subside.

How to comment on your treatment

We aim to provide the best possible service and staff will be happy to answer your questions. However, if you have any concerns you can also contact the Patient Experience Service on 0800 917 6038 or e-mail PALS@porthosp.nhs.uk

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Date: Sept 2025
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